

CLAIMS

1. A light transmitting substrate with a transparent conductive film, comprising a light transmitting substrate and a continuous transparent conductive film having a thickness of 12 to 2 nm formed on the light transmitting substrate.
2. The light transmitting substrate with a transparent conductive film according to claim 1, wherein the transparent conductive film is made of an aggregate of columnar single crystals.
3. The light transmitting substrate with a transparent conductive film according to claim 1 or 2, wherein the transparent conductive film has a maximum surface roughness within a range from 1 to 20 nm.
4. The light transmitting substrate with a transparent conductive film according to any one of claims 1 to 3, wherein the transparent conductive film has an average surface roughness within a range from 0.1 to 10 nm.
5. The light transmitting substrate with a transparent conductive film according to any one of claims 1 to 4,

wherein the transparent conductive film is a thin film made of a tin-doped indium oxide.

6. The light transmitting substrate with a transparent conductive film according to claim 5, wherein tin atoms are uniformly distributed in the thin film made of the tin-doped indium oxide.

7. The light transmitting substrate with a transparent conductive film according to any one of claims 1 to 6, wherein the transparent conductive film is a conductive film formed on the substrate through a spray pyrolysis deposition method or a pyrosol method.

8. The light transmitting substrate with a transparent conductive film according to claim 7, wherein the conductive film is formed at a temperature on the substrate within a range from 400 to 750°C.

9. The light transmitting substrate with a transparent conductive film according to any one of claims 1 to 8, wherein a transmittance to light having a wavelength of 400 nm is 88% or more.

10. The light transmitting substrate with a transparent

conductive film according to any one of (1) to (9), wherein a transmittance to light having a wavelength of 350 nm is 85% or more.

11. The light transmitting substrate with a transparent conductive film according to any one of claims 1 to 10, wherein a whole light transmittance is 90% or more.